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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,596	12/30/2003	Franklin W. Kerfoot III	1003C1	8229

7590 12/13/2004  
Grossman, Tucker, Perreault & Pfleger, PLLC  
55 South Commercial Street  
Manchester, NH 03101

EXAMINER

SEDIGHIAN, REZA

ART UNIT PAPER NUMBER

2633

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/748,596

**Applicant(s)**

KERFOOT ET AL.

**Examiner**

M. R. Sedighian

**Art Unit**

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-26, 28-33, 35, 39 and 41-45 is/are allowed.
- 6) ☒ Claim(s) 13-18, 27, 34, 36-38, 40 and 46 is/are rejected.
- 7) ☒ Claim(s) 19-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. This communication is responsive to applicant's 12/30/03 amendments in the application of Kerfoot III et al. filed 12/30/03. The amendments have been entered. Claims 13-46 are now pending.

#### Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 13-18, 34, and 46 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,704,511. Although the conflicting claims are not identical, they are not patentably distinct from each other because both application claim a WDM optical system that is comprised of a WDM combiner to provide a source signal, a transmitter that is coupled to the WDM combiner, a broadband noise source, and a filter circuitry that is coupled between the broadband noise source and the WDM combiner.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 27, 36-38, and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 27, it recites the limitation "said first number of said transmitters" in line 1-

2. There is insufficient antecedent basis for this limitation in the claim.

As to claim 36, it recites the limitations "said filtered noise signals" in line 2, and "said idler channels" in line 2. There are insufficient antecedent basis for these limitations in the claim.

As to claim 37, it recites the limitations "said first number of said information signals" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

As to claim 38, it recites the limitations "said second number of filtered noise signals" in lines 3. There is insufficient antecedent basis for this limitation in the claim.

As to claim 40, it recites the limitations "said noise signals" in line 2, and "said information signals" in line 4. There are insufficient antecedent basis for these limitations in the claim.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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7. Claims 34 and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang (US Patent No: 6,256,138).

Regarding claims 34 and 46, Huang teaches a WDM optical system (fig. 1) comprising: a WDM combiner (16, fig. 1) to provide a signal source (col. 2, lines 50-64 and 19, fig. 1); at least one transmitter (col. 2, line 60-61 and 19, fig. 1) coupled to the WDM combiner (16, fig. 1); a broadband noise source (12, fig. 1, note that pump laser module 12 generates noise due to its high electrical to optical conversion efficiency, and a low noise figure of its amplifier, as it is discussed in col. 1, lines 21-25); and a filter circuitry (14, fig. 1) coupled between the broadband noise source (12, fig. 1) and the WDM combiner (16, fig. 1).

8. Claims 34 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Alexander et al. (US Patent No: 5,726,784).

Regarding claims 34 and 46, Alexander teaches a WDM optical system (fig. 1) comprising: a WDM combiner (50, fig. 1) to provide a signal source (col. 4, lines 50-61); at least one transmitter (24, fig. 1) coupled to the WDM combiner (50, fig. 1); a broadband noise source (22, fig. 1, note that filter 33 limits the noise bandwidth of the received signal  $\lambda_{Ti}$  which is generated by the transmitter 22, as it is discussed in col. 5, lines 39-41, and it is inherent that transmitter 22 generate the noise and is a noise source); and a filter circuitry (33, fig. 2) coupled between the broadband noise source (22, fig. 1) and the WDM combiner (50, fig. 1).

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9. Claims 19-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


10. Claims 23-26, 28-33, 35, 39, and 41-45 are allowed over prior art of record.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034.

The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**M. R. SEDIGHIAN**  
**PRIMARY EXAMINER**